## CITY OF SCOTTSDALE PLANNING & DEVELOPMENT SERVICES DEPARTMENT

## INTERPRETATIONS & APPLICATIONS OF BUILDING CODES & REGULATIONS #98-1



CODE SECTION: NEC 680-25 (d)

Orig. 3/12/98, Rev. 9/16/03

## SUBJECT: SUBPANELS SUPPLYING POOL EQUIPMENT

The purpose of this section is to insure the protection and continuity of the equipment grounding conductor to pool equipment. If the pool subpanel is installed concurrent with the service entrance on the same building, and the subpanel feeder is entirely protected by the structure of the building, the feeder for the subpanel may be installed as required for "existing" panelboards in 1999 NEC 680-25 (d), item 1.

**680-25 (d) Panelboards.** A panelboard and, where installed, a disconnecting means, that are not part of the service equipment or source of a separately derived system, shall have an equipment grounding conductor installed between its grounding terminal and the grounding terminal of the applicable service equipment or source of a separately derived system. This conductor shall be sized in accordance with Table 250-122 but not smaller than No. 12. On separately derived systems, this conductor shall be sized in accordance with Table 250-66 but not smaller than No. 8. It shall be an insulated conductor and shall be installed with the feeder conductors in rigid metal conduit, intermediate metal conduit, liquid-tight flexible nonmetallic conduit, or rigid nonmetallic conduit. Electrical metallic tubing shall be permitted to be used to protect conductors where installed on or within the building in accordance with Article 348. Electrical nonmetallic tubing shall be permitted to be used to enclose the conductors where installed within the building in accordance with Article 331. The equipment grounding conductor shall be connected to an equipment grounding terminal of the panelboard and, where installed, to the enclosure for a disconnecting means.

- 1. Where the equipment grounding conductor between an existing remote panelboard and the service equipment is connected by means of a flexible metal conduit or an approved cable assembly with an insulated or covered equipment grounding conductor, the conduits listed above shall not be required.
- 2. A panelboard at a separate building shall be permitted to supply swimming pool equipment if the feeder meets the requirements for grounding in Section 250-32. Where installed, an equipment grounding conductor shall be an insulated conductor.